APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,295	01/06/2000	AKIHISA NAKAJIMA	15689.52	4919

22913   7590   02/12/2003

WORKMAN NYDEGGER & SEELEY
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UT 84111

EXAMINER
NGUYEN, DAVID Q

ART UNIT	PAPER NUMBER
2682	

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

<table>
<tr><td colspan="2" rowspan="2">Office Action Summary</td><td>Application No.
09/462,295</td><td>Applicant(s)
NAKAJIMA ET AL.</td></tr>
<tr><td>Examiner
David Q Nguyen</td><td>Art Unit
2682</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 November 2002* .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *10* .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 11/15/02 have been fully considered but they are not

persuasive.

In response to applicant's argument on pages 5 and 6, **applicants** argue:

"Perkins discloses "a method for routing a packet of information between two hosts that

are coupled to a network" (Col. 2, lines 47-49). In Perkins, each of the Mobiles Hosts (MH) 10

and a Base Access Station (BAS) 12 has a unique and independent IP address. For example,

Perkins describes that "each MH 10 has a Network Layer Address (IP address or an NSAP)"

(Col. 5, lines 18-20). Perkins refers to this address as a " `permanent address' that does not

change" (Col. 5, lines 20-21). Furthermore, "the MH 10 will own but a single IP address" (Col.

5, lines 53-54). A given MH 10 "can ascertain the network layer address of a BAS 12 (or one of

the interfaces of the BAS 12) serving the current cell wherein the MH 10 is located, and that a

BAS 12 can ascertain network layer addresses of all operational MI-Is 10 within the cell served

by the BAS 12" (Col. 6, lines 17-22). Also, "[t]he IP address of each MH 10 is associated with

one of more IP addresses of the BASs 12" (Col. 6, lines 37-38).

In addition, in Perkins, routing is performed by using an LSR option of an internet

datagram header (see from Col. 6, line 39 to Col. 7, line 46 and Figures 3A and 3B) and by

inserting an address (presumably the IP address) of a destination BAS into a destination address

BAS into a destination address of a header (see Col. 8, lines 12-17). Routing in the other

direction is accomplished by inserting the address (presumably also the IP address) into the

destination address of the header (see Col. 10, lines 18-23).

Accordingly, if a unique and independent IP address is provided to each MH 10 and BAS

12 and routing is performed by using the LSR option of the internet datagram header and by

rewriting the destination address in the header, the amount of information to be included in the

header becomes very large, and the routing becomes more complicated.

In contrast, in the present invention of Claim 1, a single IP address includes both a location

address and a user identifier. The routing is performed using this IP address. Accordingly, the

amount of information to be included in a packet is relatively small as compared to Perkins, and

the routing process becomes relatively simplified as compared to Perkins.

Therefore, Perkins does not describe, teach or suggest all of the recited features of Claim

1. Accordingly, Claim 1 is not anticipated (nor for that matter rendered obvious by) Perkins."

Examiner respectfully disagrees because examiner only considers limitations recited in

claims. Examiner believes that Perkins describe, teach or suggest all of the recited features of

claim 1. Please reread Perkins reference.

In response to applicant's argument on pages 6 and 7, **applicants** argue:

"Claim 11 and Claim 22 are also distinguishable over Perkins and Volt, either singly or in

combination, for at least the reasons provided above for Claim 1. Furthermore, the remaining

rejected claims are dependent from these patentable independent claims. Accordingly, the

dependent claims are patentable for at least the reasons that their corresponding independent

claim is patentable.

With regards to the Office Actions reference to Col. 5, lines 7-17 of Perkins, this passage

only describes conventional technology in which each IP address is divided into a LAN

identifier, and a host identifier. This does not change the fact that Perkins describes a unique and

independent IP address being assigned to each Mobile Host and Base Access Station."

Examiner respectfully disagrees because examiner believes that combination of Perkins

and Voit teaches all of the limitations recited in the claims.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-6,11-16, 22-26 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated

by Perkins et al. (US Patent 5,442,633).

Regarding claims 1-3,11-13, Perkins disclose a packet transmission method and system

in a mobile communications network system for routing a packet using an IP address between a

user inside or outside the mobile communications network system, said packet transmission

method and system comprising the steps of means for storing a location address and a user

identifier of the user in the mobile communications network system into the IP address within a

packet transmitted and/or received by the user in the mobile communication network system (see

abstract and col. 5, lines 7-17; col. 6, lines 24-39); and mean for routing the packet in according

with the location address and the user identifier in the IP address (see col. 6, lines 39-46),

wherein the location address has a hierarchical structure; and the hierarchical structure

comprising at least a network identifier indicating a subdivided network of the mobile

communication network, and a node identifier provided in connection with a termination node of

an access link in the network (see col. 4, lines 36-67, col. 5, lines 1-67; col. 6, lines 1-16).

Regarding claims 4-5 and 14-15, Perkins disclose the packet transmission method and

system comprising all of the limitations as claimed. Perkins also disclose steps of means for

routing the packet to the network in according with the network identifier; means for routing the

packet to the termination node in according with the node identifier; and means for transmitting

the packet from the termination node by selecting an access link of a related mobile

communications network in according with the user identifier (see col. 11, lines 40-68, col. 12,

lines 1-17); and means for routing the packet to the termination node, referring to the location

address in its entirety, and means for transmitting the packet from the termination node by

selecting an access link of a related mobile communications network in according with the user

identifier (see col. 6, lines 26-46).

Regarding claims 6 and 16, Perkins disclose the packet transmission method as claimed.

Perkins also disclose at least the location address constituting the IP address is transmitted to the

user in the mobile communications network system or to the user inside or outside the mobile

communications network system, when an access link is established between the user in the

mobile communications network system and the mobile communications network system (see

abstract; col. 5, lines 7-67, col. 6, lines 1-46; col. 11, lines 41-68).

Regarding claims 22-25, Perkins disclose a packet data transmission medium in a mobile

communications network system for routing a packet using an IP address between a user in a

mobile communications network system and a user inside or outside the mobile communications

network system, said packet data transmission medium storing a location address and a user

identifier of the user in the mobile communications network system into the IP address within a

packet transmitted and/or received by the user in the mobile communications network system

(see explanation in claim 1), the location address has a hierarchical structure; and the hierarchical

structure comprising at least a network identifier indicating a subdivided network of the mobile

communication network, and a node identifier provided in connection with a termination node of

an access link in the network (see explanation in claims 2-3); wherein the packet data

transmission medium consists of a packet data signal (see abstract; col. 5, lines 7-67, col. 6, lines

1-46; col. 11, lines 41-68).

Regarding claims 26 and 28, Perkins discloses a processing method in a mobile

communications network system for routing a packet using an IP address between a user in a

mobile communications network system and a user inside or outside the mobile communications

network system, the processing method and the system comprising the steps of: a domain-name

server (see fig.2); means for notifying a domain-name server of an IP address of the user in the

mobile communications network system including a location address and a user identifier of the

user in the mobile communications network system, when an access link is established between

the user in the mobile communications network system and the mobile communications network

system (see col. 6, lines 26-38); and wherein the domain-name server includes a database storing

the notified IP address in connection with a domain name of the user in the mobile

communications network system, in a database in the domain-name server (see col. 6, lines 26-

38; see fig. 2);

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

do not apply when the reference is a U.S. patent resulting directly or indirectly from an

international application filed before November 29, 2000. Therefore, the prior art date of the

reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA

35 U.S.C. 102(e)).

5.   Claims 27 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Voit et al.

(US Patent 6215790).

Regarding claims 27 and 29, Voit discloses a processing method in a mobile

communications network system and a mobile communication network system for routing a

packet using an IP address between a user in a mobile communications network system and a

user inside or outside the mobile communications network system, the processing method

comprising the steps of: means for generating, at a domain-name server, an IP address of the user

in the mobile communications network system including a location address and a user identifier

of the user in the mobile communications network system by acquiring the location address of

the user in the mobile communications network system from an apparatus managing the location

address of the user in the mobile communications network system (see col. 8-18); and Voit also

discloses a database for updating the address stored in association with that subscriber's domain

name (see col. 8-18). It is apparent that Voit discloses a database storing the generated IP address

in connection with a domain name of the user in the mobile communications network system, in

a database in the domain-name server

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims 7-9, 17-20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Perkins (US Patent Number 5442633) in view of Voit et al. (US Patent Number 6215790).

Regarding claims 7 and 17, Perkins disclose the packet transmission method and system

comprising all of the limitations as claimed. Perkins are silent to disclose storing an IP address in

connection with a domain name in a database in a domain-name server; means for having the

domain-name server send the IP address back to the user in the mobile communications network

system or to the user inside outside mobile communications network system in response to an

inquiry from the user about the IP address using the domain name; and means for having the user

that sends the inquiry carry out a packet communication using the IP address sent back.

However, Voit disclose storing an IP address in connection with a domain name in a database in

a domain-name server (see col. 18, lines 1-19); means for having the domain-name server send

the IP address back to the user in the mobile communications network system or to the user

inside outside mobile communications network system in response to an inquiry from the user

about the IP address using the domain name; and means for having the user that sends the

inquiry carry out a packet communication using the IP address sent back (see col. 16, lines 37-

67; col. 18, lines 34-67; and fig. 1). Therefore, it would have been obvious to one of ordinary

skill in the art at the time the invention was made to modify the above teaching of Voit to

Perkins so that solving the problem of establishing connection with one called party who may or

may not be located at any one of a number of specified destinations or who may be mobile.

Regarding claims 8-9 and 18-19, Perkins disclose the packet transmission method and

system modified by Voit comprising all of the limitations as claimed. Voit also disclose when the

inquiry is sent to the domain-name server, if the access link is not established then an access link

is established (see col. 16, lines 37-67; col. 17, lines 1-67; and col. 18, lines 19-29; fig. 3); the

domain-name server generates the IP address by acquiring from the mobile communications

network system a location address of the user in the mobile communications network system (see

col. 18, lines 1-29). Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to modify the above teaching of Voit to Perkins so that solving

the problem of establishing connection with one called party who may or may not be located at

any one of a number of specified destinations or who may be mobile.

Regarding claim 20, Perkins disclose the packet transmission system comprising all of

the limitations as claimed. Perkins further disclose an access link termination node including

access link management means for establishing or releasing an access link; means for storing the

location user location registration information in a memory in response to a location registration

request from a user, and for providing the user with the location address of the user (see col. 6,

lines 17-46). Perkins are silent to disclose that the system comprises a domain-name server

including a database for storing an access link termination node in a subdivided network in the

mobile communications network in connection with an IP address and a domain name; the

access link termination node including means for transmitting the user location registration

information to the domain-name server in response to the location registration request from the

user; and wherein said domain-name server includes means for storing IP address including the

location address of the user, means for receiving the user location registration information from

the access link termination node, and means for updating the IP address using the user location

registration information received. However, Voit disclose that the system comprises a domain-

name server including a database for storing an access link termination node in a subdivided

network in the mobile communications network in connection with an IP address and a domain

name (see col. 18, lines 1-29); the access link termination node including means for transmitting

the user location registration information to the domain-name server in response to the location

registration request from the user; and wherein said domain-name server includes means for

storing IP address including the location address of the user, means for receiving the user

location registration information from the access link termination node, and means for updating

the IP address using the user location registration information received (see col. 18, lines 1-29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the above teaching of Voit to Perkins so that solving the problem of

establishing connection with one called party who may or may not be located at any one of a

number of specified destinations or who may be mobile.

Regarding claim 30, Perkins discloses a mobile communications network system for

routing a packet using an IP address between a user in a mobile communications network system

and a user inside or outside the mobile communications network system, the mobile

communications network system comprising an access link termination node and a domain-name

server, wherein the access link termination node comprises Perkins further disclose an access

link termination node including access link management means for establishing or releasing an

access link; means for storing the location user location registration information in a memory in

response to a location registration request from a user, and for providing the user with the

location address of the user (see col. 6, lines 17-46). Perkins are silent to disclose that the system

comprises a domain-name server including a database for storing an access link termination node

in a subdivided network in the mobile communications network in connection with an IP address

and a domain name; the access link termination node including means for transmitting the user

location registration information to the domain-name server in response to the location

registration request from the user; and wherein said domain-name server includes means for

storing IP address including the location address of the user, means for receiving the user

location registration information from the access link termination node, and means for updating

the IP address using the user location registration information received. However, Voit disclose

that the system comprises a domain-name server including a database for storing an access link

termination node in a subdivided network in the mobile communications network in connection

with an IP address and a domain name (see col. 18, lines 1-29); the access link termination node

including means for transmitting the user location registration information to the domain-name server in response to the location registration request from the user; and wherein said domain-name server includes means for storing IP address including the location address of the user, means for receiving the user location registration information from the access link termination node, and means for updating the IP address using the user location registration information received (see col. 18, lines 1-29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of Voit to Perkins so that solving the problem of establishing connection with one called party who may or may not be located at any one of a number of specified destinations or who may be mobile.

8.   Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US Patent Number 5442633) in view of over the admitted prior art

       Regarding claims 10 and 21, Perkins disclose the packet transmission method and system comprising all of the limitations as claimed. Perkins are silent to disclose the packet including the IP address is routed in according with the IP address with or without encapsulating the packet. However, the admitted prior art discloses the packet including the IP address is routed in according with the IP address with or without encapsulating the packet (see page 1, 10-17; page 2, lines 1-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of the admitted prior art to Perkins in order to increase an amount of the information to be transmitted.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).
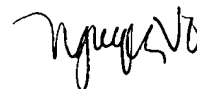
A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communication from the examiner

should be directed to Nguyen Q. David whose telephone number is (703) 605-4254. The

examiner can be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Vivian Chin can be reached on (703)308-6739. The fax numbers for the organization

where this application or proceeding is assigned are (703) 872-9314 for all communications.

DN

David Q. Nguyen

2/6/03

NGUYEN T. VO
PRIMARY EXAMINER